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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/394,118

Applicant(s)

FOOTE, WILLIAM F.

Examiner

Lilian Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38 - 72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38 - 72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 38 – 72 are pending. Claims 1 – 37 have been cancelled.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 38 - 72 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.

4. **Claims 38 – 59** are directed to method steps, which can be practiced mentally in conjunction with pen and paper, therefore they are directed to non-statutory subject matter. Specifically, as claimed, it is uncertain what performs each of the claimed method steps. Moreover, each of the claimed steps, inter alia, associating, updating, disassociating, allocating, indicating, notifying, determining, aborting, can be practiced mentally in conjunctions with pen and paper. The claimed steps do not define a machine or computer implemented process [see MPEP 2106]. Therefore, the claimed invention is directed to non-statutory subject matter. (The examiner suggests applicant to change “method” to “computer implemented method” in the preamble to overcome the outstanding 35 U.S.C. 101 rejection).

5. **Claims 60 - 72** lack utility and is non-statutory as not being tangibly embodied in a manner to as to be executable.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 38 and 60 are rejected under 35 U.S.C. 102(a) as being anticipated by Czajkowski et al. (“Internet Servers, Safe-Language Extensions, and Structured Resource Control”, hereinafter Czajkowski).

8. Regarding **claims 38 and 60**, Czajkowski discloses a method for managing resource usage of code downloaded to a computer system, the method comprising:

for each code downloaded to the computer system, associating a resource indicator with all threads that are executed directly by the downloaded code and all threads that are initiated by the downloaded code, wherein all of the threads that are executed directly by the downloaded code and all threads that are initiated by the downloaded code are defined as a set of related code (abstract; a particular resource accounts for execution entities. Page 3, 8th paragraph, and page 6, 2nd – 3rd paragraphs: resource account and account stack, associating threads with particular account stacks. Page 7, 5th paragraph); and

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updating the resource indicator when the related code changes its actual collective resource usage of the particular resource so that the resource indicator only tracks actual resource usage of the related code (page 6, 2nd – 3rd paragraphs: resource account and resource account stack are created for each request, associating threads with particular account stacks. Page 7, 5th paragraph: every thread has its own resource account which then pushed on the resource stack account.)

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 38 – 46, 50 - 58, 60 – 63, 66 – 69 and 70 - 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Culbert (U.S. Pat 5,838,968) in view of Judge et al (U.S. Pat. 6,430,570, hereinafter Judge).

11. Regarding **claims 38 and 60**, Culbert discloses a method for managing resource usage of a particular resource by a set of related code (fig. 4, codes executed as tasks), the method comprising:

associating a resource indicator with the related code for indicating an amount of resource usage of the particular resource by the related code when executed (fig. 3 show task resource vector associated with resources which are monitored by the master

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resource of fig. 2, col. 4, lines 37 – 39. Col. 8, lines 38 – 50: task resource associated with the current run level are updated with actual resource usage measurement. Col. 10, line 53 – col. 11, line 4: task 35 would determine what its actual utilization for resources currently was and update the contents of resource utilization record 320 to reflect that usage. Col. 3, lines 20 – 58, “...keeping track of actual system resource utilization through periodic measuring by updating the current task utilization record to reflect the consumption of the of the plurality of system resources, and by using this information to allocate or deallocate resources from tasks in order to satisfy system resource requests”. According to Microsoft computer dictionary, task by definition, is a stand-alone application or a subprogram that is run as an independent entity. In other words, a task consists of source code or program instructions. Thus, the execution of task, which consumes resource, means the execution of code consumes the resource); and

updating the resource indicator when the related code changes its actual collective resource usage of a particular resource so that the resource indicator only tracks actual resource usage of the related code (col. 3, lines 45 – 57: updating the current task utilization record to reflect the consumption of the system resources and use this information to allocate and deallocate resources from tasks in order to satisfy system resource requests. Col. 7, lines 20 – 27: updates the usage value of global system resource in resource master list by calling an update routine for maintaining current information based on actual resource usage to ensure the maximum number of concurrent tasks to be supported. Col. 8, lines 38 – 50: task resources associated with the current run level are updated with actual resource usage measurements. Col. 10, line 53 – col. 11, line 4: task 35 would determine what its actual utilization for resources currently was and

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update the contents of resource utilization record 320 to reflect that usage. Col. 11, lines 36 – 44, memory usage increases for a task).

Culbert however did not specify the tasks (related codes) are downloaded to the system. Nevertheless, Judge discloses of a Java application manager that responsible for resource management with downloading, execution and caching of multiple instances of the same application and/or of another application which request from the client (col. 3, lines 9 – col. 4, line 23, and col. 7, line 66 – col. 8, line 58).

It would have been obvious for one of ordinary skill in the art, at the time the invention was made to incorporate this teaching from Judge to Culbert's invention so that resource usage from a particular source can be monitored to avoid problem such as memory shortage for performance enhancement.

12. Regarding **claim 39**, Culbert discloses a method as recited in claim 38 wherein the resource indicator's amount represents an absolute value of the resource usage (col. 7, lines 14 – 18, kilobytes needed for memory 100).

13. Regarding **claim 40**, Culbert further discloses a method as recited in claim 38 wherein the resource indicator's amount represents a proportional value of the resource usage (col. 7, lines 20 – 27, maintaining current information based on actual resource usage, col. 8, lines 42 – 46, updated with actual resource usage measurements).

14. Regarding **claim 41**, Culbert discloses a method as recited in claim 38 further comprising:

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associating the related code with each resource portion of the particular resource that is allocated for the related code (abstract: The system and method manage an arbitrary set of system resources and globally optimize resource allocation across system tasks in a dynamic fashion, according to a system specified performance model .

Resource allocated to system tasks, whose codes are executed. See also col. 5, lines 31 – 36, col. 6, line 59 – col. 7, line 13, resource manager controls resource allocation, and col. 3, lines 46 - 54); and

disassociating the related code with each resource portion of the particular resource that is deallocated for the related code (col. 3, lines 45 – 54, deallocate resources from tasks in order to satisfy system resource requests),

wherein the resource indicator is increased when a resource portion is allocated (col. 6, line 65 – col. 7, line 2, resource indicator showing the currently allocated unit) for the related code.

As per the feature wherein the resource indicator is decreased when a resource portion is deallocated and increased when a resource portion is allocated for the related code, as mentioned above, since the resource indicator shows the current allocated units or an index, it inherently indicates the resource allocation, whether increased or decreased, as claimed.

15. Regarding **claim 42**, Culbert did not clearly disclose the step of allocating the resource when resource indicator is below a maximum predetermined threshold and indicating an error and not allocating the resource when the resource indicator is above the maximum predetermined threshold.

Nevertheless, Judge discloses of indicating an error when applications try to execute in low or no-memory situations (col. 7, line 66 – col. 8, line 36). As resource allocation requests cannot be immediately satisfied, it is considered obvious to one of ordinary skill in the art that resource is limited and hence having a maximum amount. Furthermore, as resource has been exhaustively allocated, OutOfMemoryError error is generated. This can be understood as indicating an error and not allocating the particular resource, as claimed in claim 42. As a result, it is also considered obvious to one of ordinary skill in the art, to realize the feature in which, OutOfMemoryError would not exist as memory allocation request can be immediately satisfied, hence implying that allocating the particular resource to the related code is an obvious fact when the resource indicator is below a maximum predetermined threshold.

It is considered obvious to one of ordinary skill in the art, at the time the invention was made, to incorporate this feature to Culbert's invention so that resource can be better managed for efficiency purposes.

16. Regarding **claim 43**, see citation above in claim 42 regarding OutOfMemoryError exception.

17. Regarding **claim 44**, Culbert did not teach the related code is disassociated through a garbage collection procedure. Nevertheless, Judge discloses the garbage collector reclaiming the memory (col. 7, line 66 – col. 8, line 19, lines 43 – 52 and col. 9, lines 41 – 51).

It would have been obvious for one having an ordinary skill in the art, at the time the invention was made to incorporate this feature to Culbert's invention so that the additional allocation request can be satisfied.

18. Regarding **claims 45 and 56**, the examiner takes an Official Notice that the particular resource is selected from a group consisting a memory usage, open file usage, open socket usage, and monitor usage are considered well-known in the art. It would be obvious for one of ordinary skill in the art to consider including memory usage, open file usage, open socket usage, and monitor usage as the resources so that additional resources can be available for use in the computing environment.

19. Regarding **claim 46**, Culbert further teaches a method as recited in claim 45 wherein the resource indicator indicates a percentage of the particular resource that is utilized by the related code (col. 8, lines 3 – 18, 1% CPU utilization).

20. Regarding **claim 50**, Culbert further teaches a method as recited in claim 38 wherein the particular resource is CPU usage or network usage (col. 8, lines 11 – 18, CPU consumption is resource usage).

21. Regarding **claim 51**, Culbert further teaches a method, which associates a threshold with a particular resource and the related code (fig. 2, resource master list, resource indicator, and max units, all of which means resource indicator with max units for each resource).

However, Culbert didn't clearly show the step of indicating that the related code's priority for CPU usage is decreased when the amount of resource usage of the particular resource by the related code exceeds the threshold. Instead, Culbert shows that when the resource is constrained and tasks have difficulty accessing the needed resource, the resource manager must decide whether to lower the available resources for current tasks or fail the task allocation request (col. 9, lines 15 – 20). This obviates the claimed feature in which code's priority for usage is decreased when the resource is not available (exceeds the threshold).

22. Regarding **claim 52**, Culbert further teaches a method, which associates a second threshold with a particular resource and the related code (col. 8, lines 1 – 18: minimum resource utilization configuration, col. 3, lines 46 – 54 and line 66 – col. 4, line 3).

However, Culbert didn't clearly show the step of indicating that the related code's priority for CPU usage is boosted when the amount of resource usage of the particular resource by the related code drops below the second threshold. Instead, Culbert shows that a minimum resource utilization specification level for the tasks need to be maintained (col. 8, lines 5 – 9). This obviates the claimed feature in which code's priority for usage be boosted when the resource utilization is below the minimum specification (below the threshold) to avoid task termination and to optimize system performance.

23. Regarding **claim 53**, Culbert did not teach the related code configured to be executed on behalf of an applet in the form of threads. Nevertheless, Judge discloses of

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related code executes in the form of threads (the application object creates a new thread: col. 12, lines 16 – 40 and 7) and the applications can be executed within a Java-enabled Web browser with embedded Java applet (Java applet: col. 3, lines 22 – 37).

It would have been obvious for one of ordinary skill in the art, at the time the invention was made to implement Culbert's related code with the embedded Java applet to take advantage of the object linking and embedding feature.

24. Regarding **claim 54**, Culbert discloses a method for managing resource usage of a particular resource by a set of related code (fig. 4, codes executed as tasks), the method comprising:

associating a resource indicator (fig. 2, resource indicator 220, col. 6, line 63 – col. 7, line 2,) with the related code (resource manager 170, col. 6, lines 51 – 58) that indicates an amount of resource usage of the particular resource by the related code (col. 6, line 63 – col. 7, line 2, maximum number of allocable units, 230, and the currently allocated units 240); and
updating (col. 7, lines 20 – 27, updates the usage value) the resource indicator when the related code increases or decreases its collective resource usage of the particular resource (col. 11, lines 36 – 44, memory use increases).

25. Regarding **claim 55**, Culbert further teaches the resource include memory usage and CPU usage (col. 7, lines 2 – 6). However, Culbert did not clearly mention the network usage as further limited as claimed. Nonetheless, the reference of Judge readily

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disclose of a network computer system (figs 1 and 2, and col. 2, lines 29 – 42, col. 3, line 16 – col. 4, line 9).

It would have been obvious for one of ordinary skill in the art, at the time the invention was made, to incorporate this feature to Culbert's invention so that it can be operated in the network environment.

26. Regarding claims **57 and 70**, Culbert did not teach the additional limitations as claimed. Nevertheless, Judge teaches that threads defined as the set of related code based on which threads are assigned to a same protection domain (fig. 3, 7 and 8).

It would have been obvious for one of ordinary skill in the art, at the time the invention was made, to incorporate this feature to Culbert's invention so that resource usage from a particular resource can be monitored for performance analysis.

27. Regarding claims **58 and 71**, Culbert did not teach the additional limitations as claimed. Nevertheless, Judge teaches of indicating an error when applications try to execute in low or no-memory situations (col. 7, line 66 – col. 8, line 36, fig. 9). As resource allocation requests cannot be immediately satisfied, it is considered obvious to one of ordinary skill in the art that resource is limited and have reached the maximum amount.

It would have been obvious for one of ordinary skill in the art, at the time the invention was made, to incorporate this feature to Culbert's invention so that resource usage can be managed more efficiently.

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28. **Claims 61 – 63 and 66 -69** are rejected on the same ground as stated in claims 39 – 44, 46 and 50 – 55 above.

29. Claims 47 - 49 and 64 – 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Culbert (U.S. Pat 5,838,968) in view of Judge et al (U.S. Pat. 6,430,570, hereinafter Judge) as applied to claims 38, 45 and 60, 63 above, further in view of Mayle et al. (U.S. Pat. 6,182,022, hereinafter Mayle).

30. Regarding **claim 47**, although Culbert and Judge disclose a method as recited in claim 45, they did not clearly teach of the additional limitation as claimed. Nevertheless Mayle teaches the step of:

associating a plurality of thresholds with a the particular resource and the related code (col. 3, lines 7 – 11, current normal threshold curve, service level maximum threshold, and minimum threshold. Col. 8, lines 20 – 25, percent system utilization being monitor); and

notifying a registered resource callback when the amount of resource usage of the particular resource by the related code exceeds a first one of the thresholds (col. 4, lines 16 – 19, receive an event notification when an attribute exceeds its corresponding current normal threshold, col. 4, lines 36 – 52, , current normal threshold 304 is recalculated periodically. Fig. 3, collected metric 308 exceeds current metric threshold 304 during T1 period).

It would have been obvious for one of ordinary skill in the art, at the time the invention was made, to incorporate these features to Culbert and Judge's invention so that

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system administrator is able to identify those periods of time when the collected metric for a particular attribute (resource) is outside the boundary of the particular attribute current normal operating range (col. 4, lines 40 – 44).

31. Regarding **claim 48**, although Culbert and Judge disclose a method as recited in claim 47, they didn't clearly teach of the additional limitation as claimed. Nevertheless, the reference of Mayle further teaches the step of:

notifying a registered resource callback when the amount of resource usage of the particular resource by the related code drops below a second one of the thresholds that has a different value than the first threshold (col. 4, lines 16 – 19, receive an event notification when an attribute falls short of its corresponding current normal threshold, col. 4, lines 36 – 52, current normal threshold 304 is recalculated periodically. Fig. 3, collected metric 326 drops below current metric threshold 304 during time T3 period which has a different value than the first threshold during T1 period).

It would have been obvious for one of ordinary skill in the art, at the time the invention was made, incorporate this feature to Culbert and Judge's invention so that system administrator is able to identify those periods of time when the collected metric for a particular attribute (resource) is outside the boundary of the particular attribute current normal operating range (col. 4, lines 40 – 44).

32. Regarding **claim 49**, although Culbert and Judge disclose a method as recited in claim 38, they didn't clearly teach of the additional limitation as claimed. Nevertheless, the reference of Mayle teaches the step of:

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notifying a registered resource callback when the amount of resource usage of the particular resource by the related code drops below the first threshold (receive an event notification when an attribute falls short of its corresponding current normal threshold, col. 4, lines 16 – 19, current normal threshold 304 is recalculated periodically, col. 4, lines 36 – 52, fig. 3, collected metric 309 drops below current metric threshold 304 during time T1 period).

It would have been obvious for one of ordinary skill in the art, at the time the invention was made, incorporate this feature to Culbert and Judge's invention so that system administrator is able to identify those periods of time when the collected metric for a particular attribute (resource) is outside the boundary of the particular attribute current normal operating range (col. 4, lines 40 – 44).

33. **Claims 64 – 65** are rejected on the same ground as stated in claims 47 – 49 above.

34. Claims 59 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Culbert (U.S. Pat 5,838,968) in view of Judge et al (U.S. Pat. 6,430,570, hereinafter Judge) as applied to claims 38 and 60 above, further in view of Applicant's admitted prior art.

35. Regarding **claims 59 and 72**, although Culbert and Judge teach a method as recited in claim 38, they didn't clearly teach of the additional limitation as claimed. Nevertheless, applicant's admitted prior art teach of an integrated system with a set top box or a navigational system (specification page 1, 3rd - 4th paragraph).

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It would have been obvious for one of ordinary skill in the art, at the time the invention was made, to combine with Culbert and Judge's invention so that resource can be better managed for efficiency purposes.

Response to Arguments

36. Applicant's arguments filed 12/22/04 have been fully considered but they are not persuasive for the reasons set forth below.

37. With respect to applicant's remark in which "the applicant's invention is not intended to be used in a server environment" (page 10, 6th paragraph), the examiner would like to point out the claim language recites managing resource usage of code download to a computer system. Thus, a server can also be a computer system that executes code downloaded from another server.

38. On page 10, 6th paragraph, applicant argues in essence "...applicants' invention discovers when the related code changes its actual collective resource usage, and updates the resource indicator at that point... applicants' method is more dynamic in nature than the method presented in Czajkowski, which uses a preset account size." Applicant is arguing a feature of the invention not specifically stated in the claim language, which is improper. Claims subject matter, not the specification, is the measure of invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. In re Self, 213, USPQ 1,5, (CCPA 1982; In re Priest, 199 USPQ 11,15 (CCPA 1978). In this case, applicant has not specifically claimed the resource indicator

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has to update at that point or the method is more dynamic in nature. A preset account size disclosed in Czajkowski set the limit for the account. Thus, resource usage is being tracked for resource account to detect that “whenever an attempt is made to charge more resources than allowed by a given resource account, an associated resource overuse callback is raised.” Therefore this argument is moot.

39. The examiner inadvertently cited the Czajkowski reference under 35 U.S.C 102(e), which is improper. The reference is now cited under 35 U.S.C 102 (a).

40. On page 11, 5th paragraph, applicant argues in essence “this feature advantageously allows implementation of procedures with respect to each set of threads executed or initiated on behalf of each downloaded code when actual usage by such related threads exceeds a particular limit. For example, these related threads can be terminated together when...they are exceeding their resource usage”. Applicant is again arguing a feature of the invention not specifically stated in the claim language, which is improper. Claims subject matter, not the specification, is the measure of invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. In re Self, 213, USPQ 1,5, (CCPA 1982; In re Priest, 199 USPQ 11,15 (CCPA 1978). In this case, applicant has not specifically claimed resource usage of the related threads exceeds a particular limit. Therefore this argument is moot.

41. With respect to applicant’s argument that related code is not inherently included in each of the task execution (page 12, 1st paragraph), task according to Microsoft

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computer dictionary, is defined as a stand-alone application or a subprogram that is run as an independent entity. In other words, a task consists of source code or program instructions. Thus, the execution of task, which consumes resource, means the execution of code consumes the resource. Therefore this argument is moot.

42. On page 12, 2nd paragraph, applicant argues in essence that “the updates in Culbert are either ‘periodic’ or ‘passive’ in nature, and do not occur as a result of a set of related code changing its actual collective usage, as claimed”. The claim language recites “updating the resource indicator when the related code changes its actual collective resource usage”. The claim does not specifically states the specific time when to update, just so as long as the collective usage is updated to reflect the changes. Furthermore, even though the updating in Culbert activated is periodic, the resource indicator only gets to update if there is a changes in its collective usage. Therefore this argument is moot.

43. With respect to applicant’s argument that “... since the actual resource usage of the error intolerant tasks is never taken into account in Culbert, there would be no update if the error intolerant tasks were to change their resource usage, as required by claim 38” (page 12, 3rd paragraph), applicant is again arguing a feature of the invention not specifically stated in the claim language, which is improper. Claims subject matter, not the specification, is the measure of invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. In re Self, 213, USPQ 1,5, (CCPA 1982; In re Priest, 199 USPQ 11,15 (CCPA 1978). In this case, applicant has not specifically claimed the error intolerant tasks. Therefore this argument is moot.

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44. In response to applicant's arguments against the references individually (page 12, 4th paragraph), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With respect to applicant's argument that Judge fails to cure the deficiencies of Culbert (page 13, 2nd paragraph), applicant notes that Judge was used to show the limitation of downloaded related code. Nevertheless, Judge's teaching can also read on the claims 38 and 61 language to show resource indicating for tracking changes in actual resource usage only by a particular set of related code executed in the manner as claimed. For instance, col. 8, lines 1 – 5 indicating that out of memory occur when memory resource runs out during the execution of the applications. It is obviously for an ordinary skill in the art to recognize that the memory usage has been tracked for the executed applications in order to detect the shortage of memory. Also, col. 8, lines 25 – 30 discloses that memory usage for a particular application execution is being monitored and if insufficient memory is the case, other applications objects will be unloaded to keep the application running. In other words, the unloading of other application objects due to the insufficient memory for running a particular application indicating the changes in actual resource usage (need more memory) by a particular set of related code (application). Thus, Judge also suggests such feature as claimed.

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45. In response to applicant's argument that there is no suggestion to combine the references (page 13, 2nd paragraph), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation for rejection is found in the knowledge generally available to one of ordinary skill in the art.

46. In response to applicant's argument that both Culbert and Judge relate to different ways of managing low-memory conditions in computer devices or system is not sufficient as motivation to combine the two documents (page 13, 2nd paragraph), the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

47. Applicant's arguments (page 13, 4th paragraph) fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

48. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Czajkowski et al. disclosed a resource accounting interface for memory, CPU time and network resource consumed by individual threads or groups of threads.

Conclusion

49. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 571-272-3774. The examiner can normally be reached on Monday - Thursday, 7:30am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-210

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lilian Vo
Examiner
Art Unit 2195

lv
April 1, 2005


MENG-AI T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100